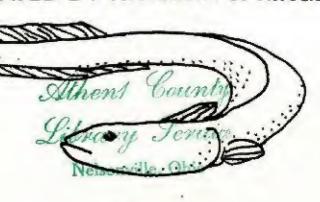


A FIRST LOOK AT FISH

BY MILLICENT E. SELSAM
AND JOYCE HUNT

ILLUSTRATED BY HARRIETT SPRINGER

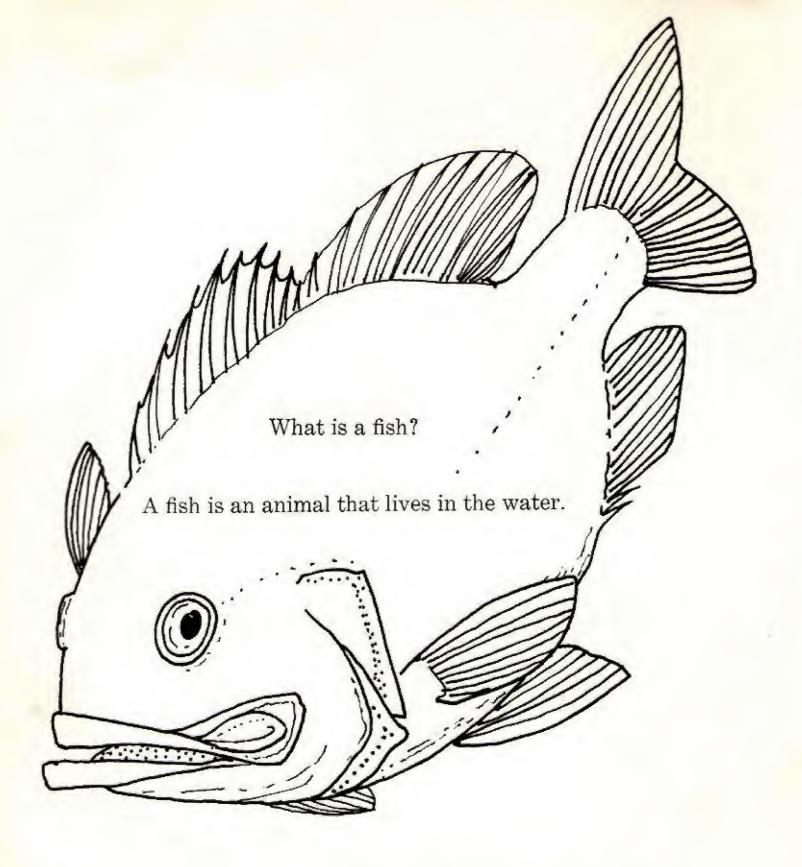




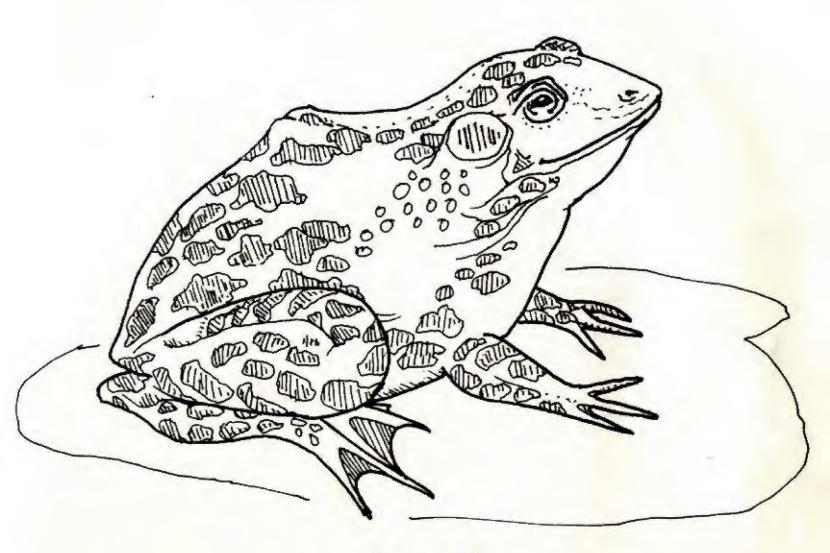
A fish is a fish is a fish—or is it? This "first look" at fish helps a young child discover what kind of animal a fish is and how fish differ from each other in shape, size and fins. He or she will become actively involved in telling fish apart through exciting puzzles and illustrations.

A FIRST LOOK AT SERIES

Each of the nature books conceived by Millicent E. Selsam for this series is planned to develop the child's powers of observation.



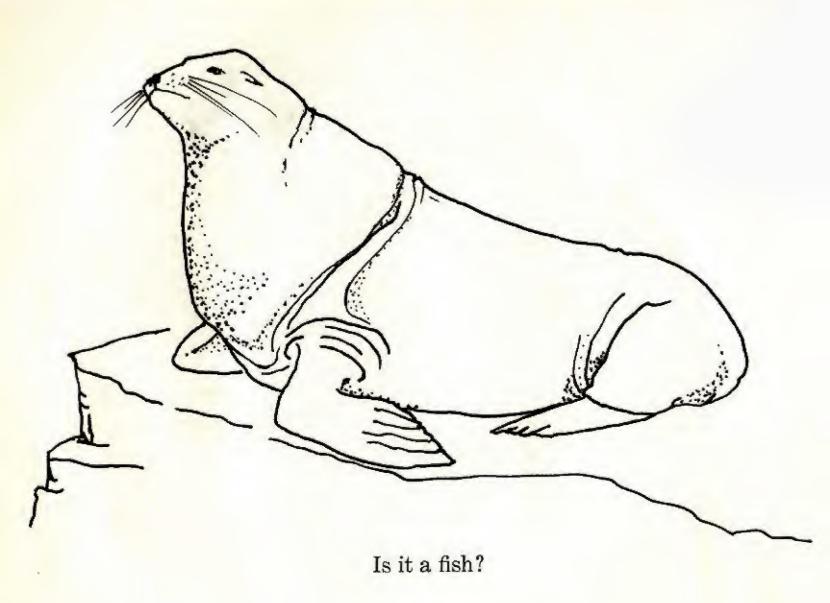
This is an animal that lives in the water.



Is it a fish?

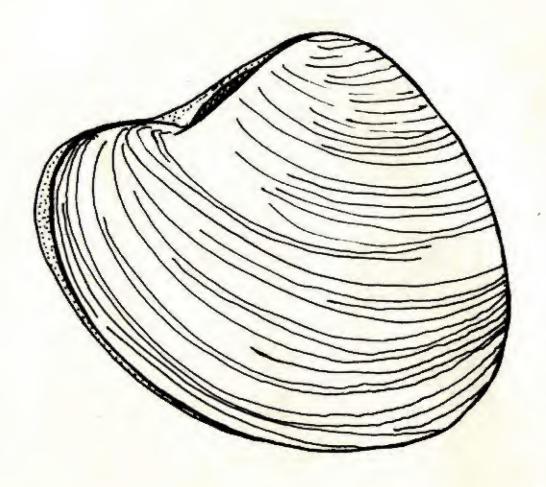
No, it is a frog.

This is another animal that lives in the water.



No, it is a sea lion.

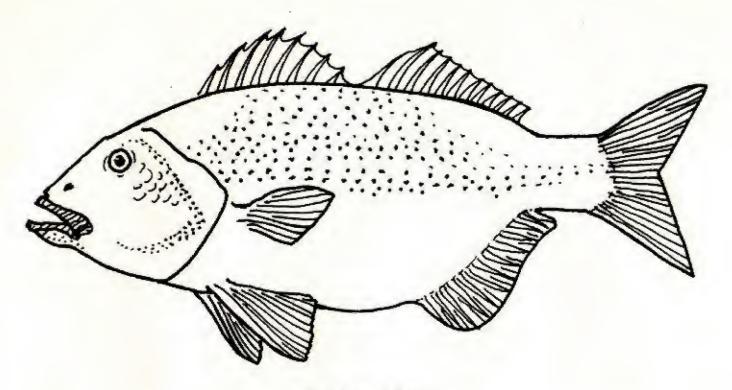
This is another animal that lives in the water.



Is it a fish?

No, it is a clam.

This is still another animal that lives in the water.



Is it a fish?

Yes, it is a fish. Why?

It has fins.

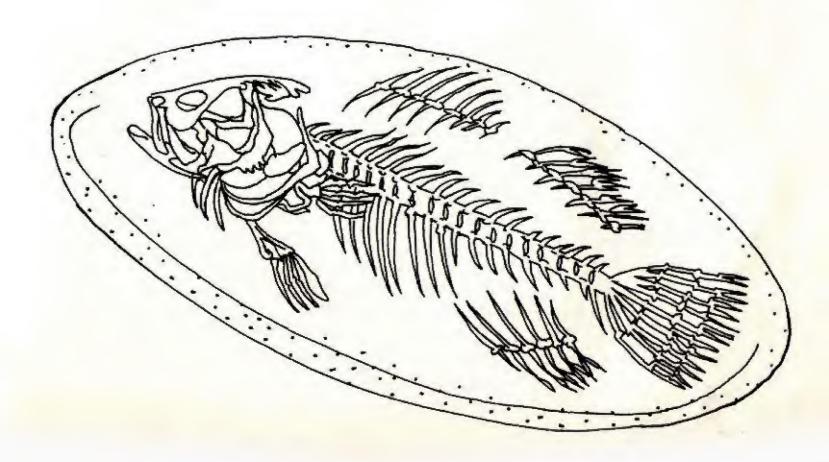
It has a backbone.

It breathes through gills.

The temperature of a fish is the same as the water it lives in.

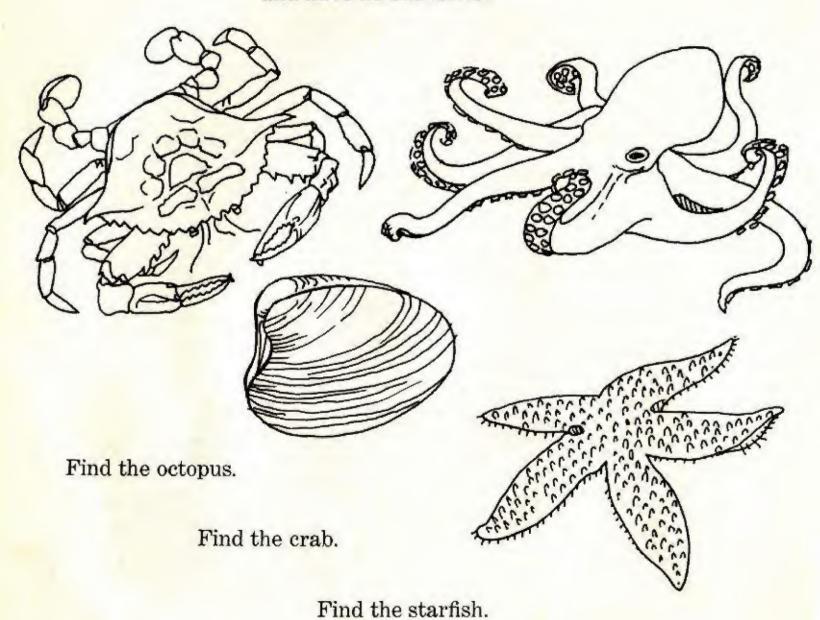
Did you ever eat a fish?

Then you know it has a skeleton with a backbone and other bones attached to it.



A puzzle:

What animals live in the water and have no backbone?

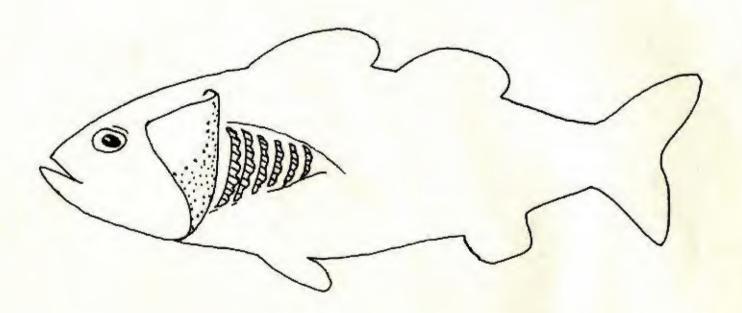


Find the clam.

How does a fish breathe?

A fish breathes through its gills.

Lift up the flap behind the eyes of a fish and you will see red things that look like this.

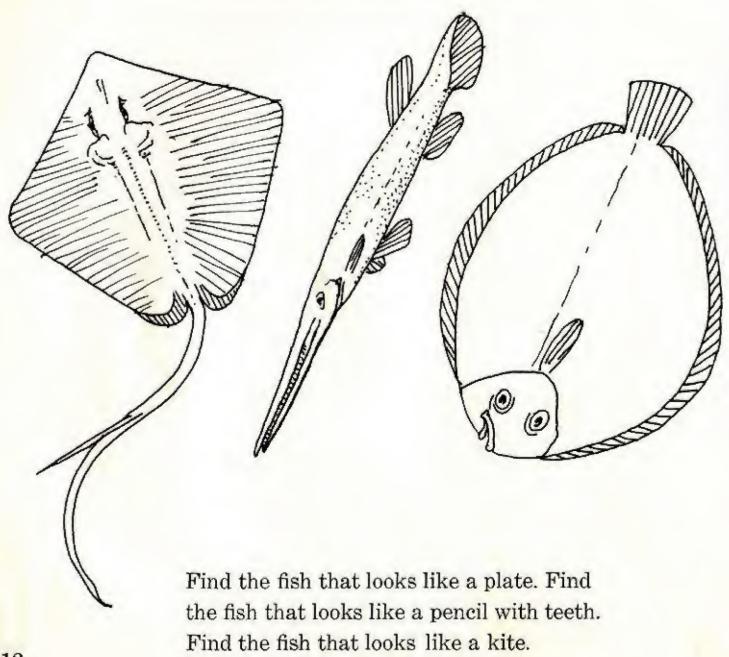


These are the gills. The oxygen in the water goes into the blood in the gills.

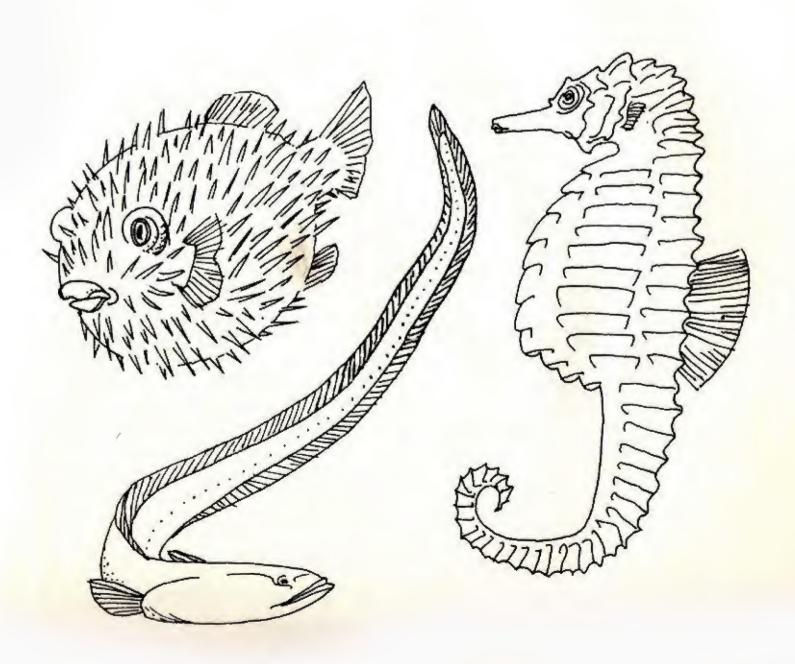
We have lungs. The oxygen in the air goes into the blood in our lungs.

How do you tell one fish from another fish?

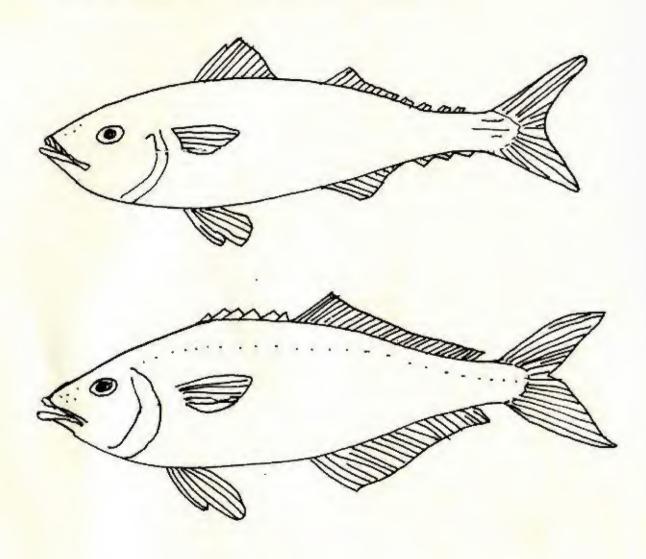
Sometimes you can tell by the shape.



Find the fish that has a head like a horse. Find the fish that looks like a pincushion. Find the fish that looks like a worm.

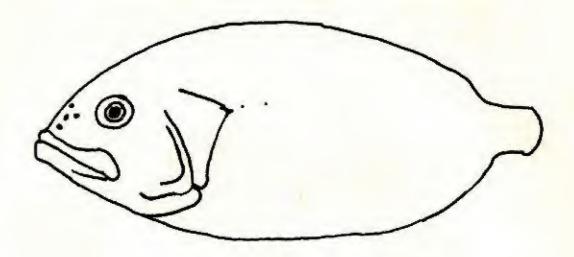


But sometimes it is hard to tell one fish from another fish just by its shape. Here are two fish. Can you tell them apart?

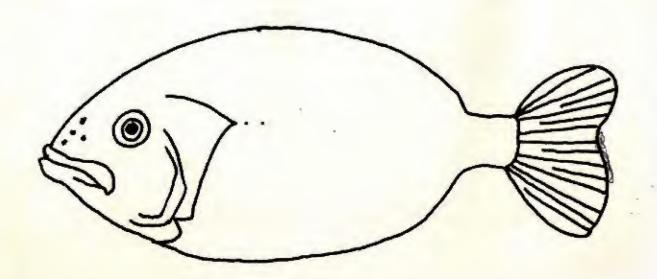


Now we have to look closely. Both fish have the same shape. But the fins are different. What kinds of fins does a fish have?

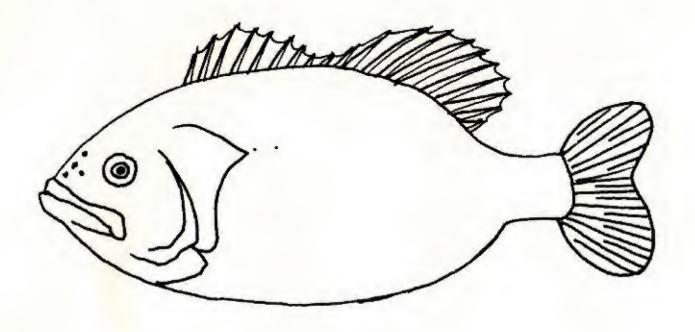
Here is a picture of a fish without its fins.



Here is the same picture with something added. Find the tail fin.



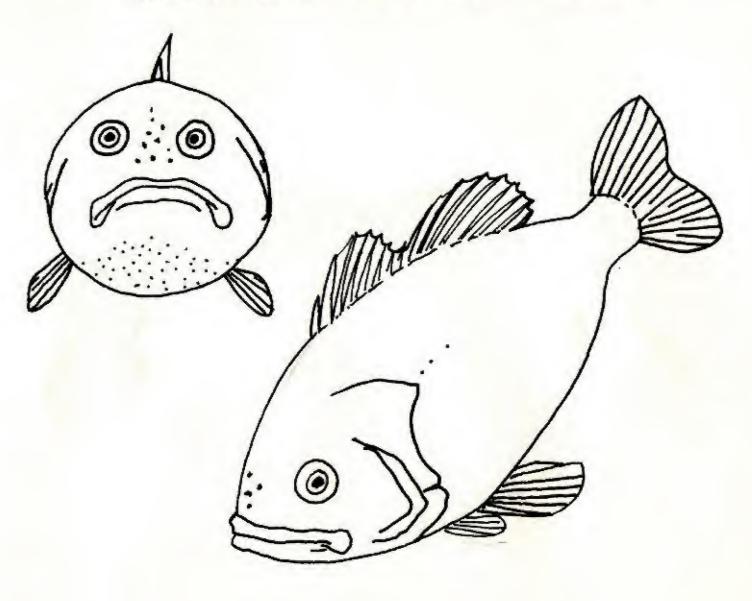
Here is the same picture with something new added.



Find the top fin.

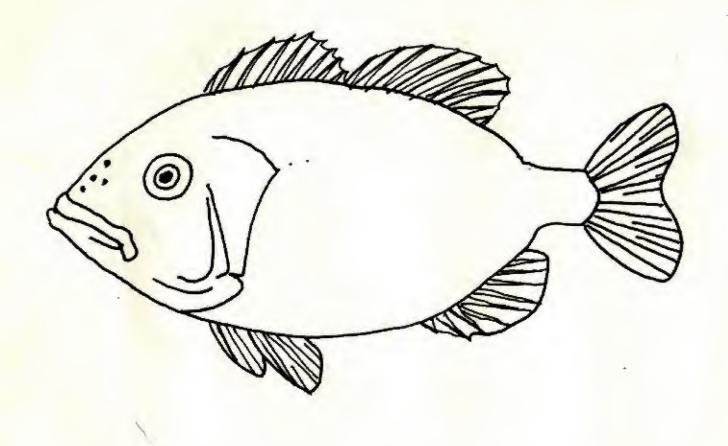
Sometimes the top fin is split into two or three parts.

Here is the same picture with still more fins added.



Find the bottom two fins.

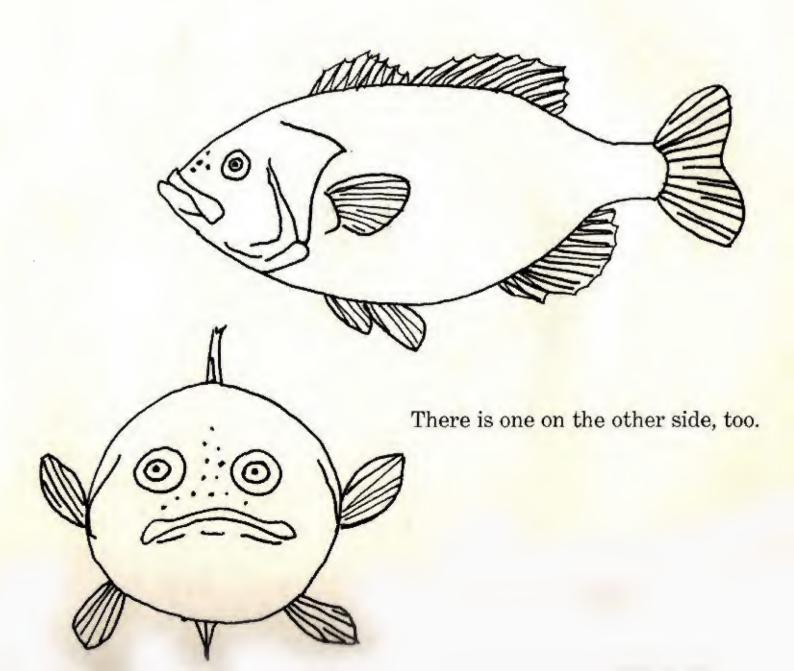
Now here is another bottom fin.



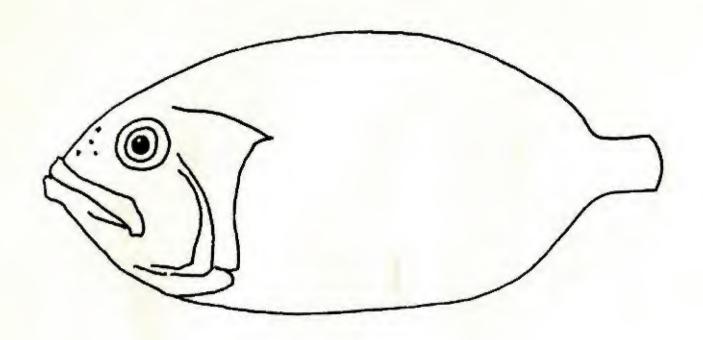
Find this fin near the tail fin.

Look again.

Another fin has been added on the fishes' side, behind the eyes.

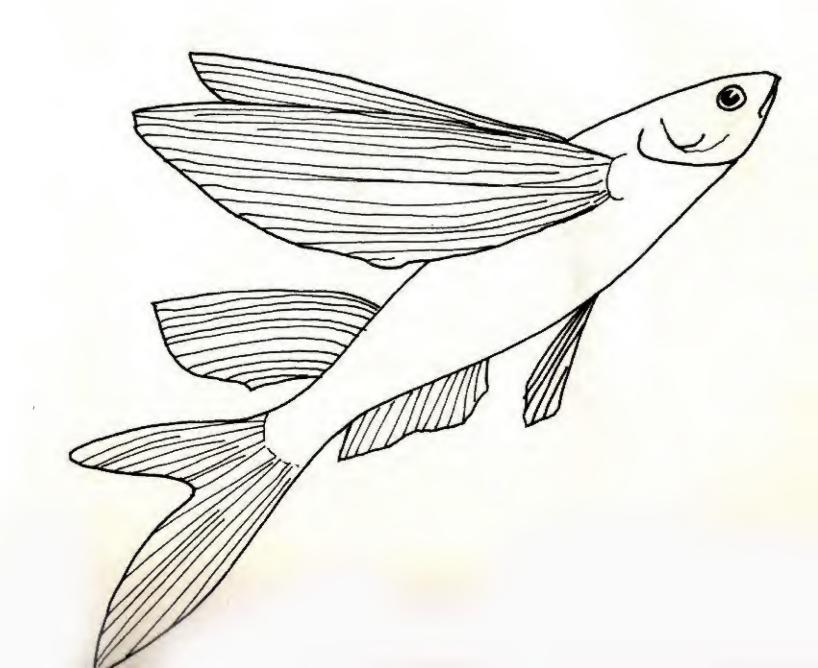


Now draw this shape on a piece of paper.

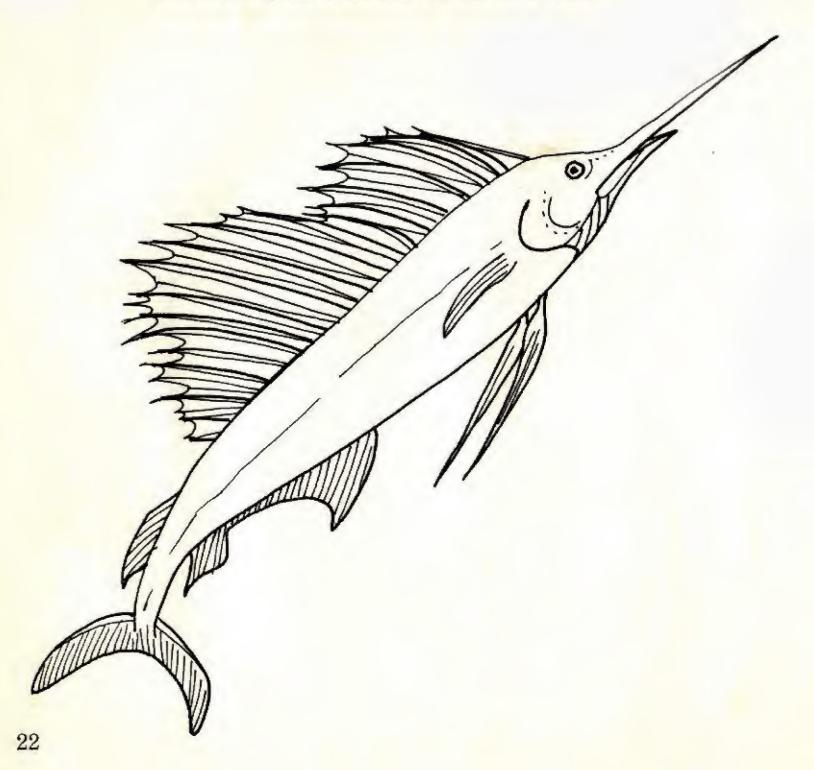


Add the fins.

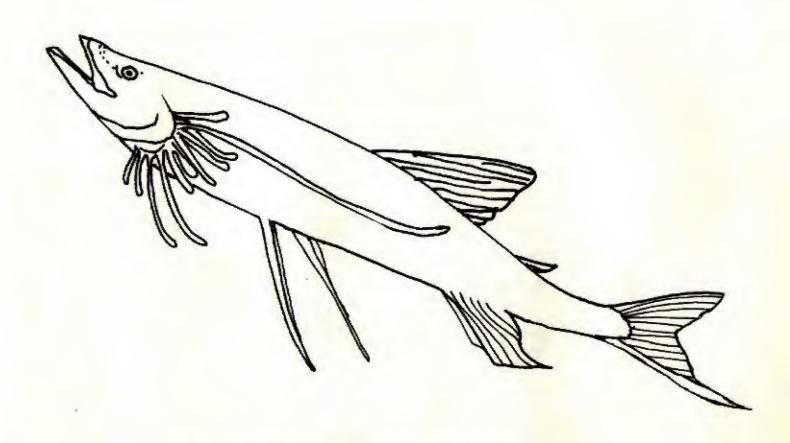
If you did it right, your picture will look like the fish on the top of page 19. Sometimes, fins have special shapes. Here the side fins look almost like wings.



Here the top fin looks like the sail of a boat.



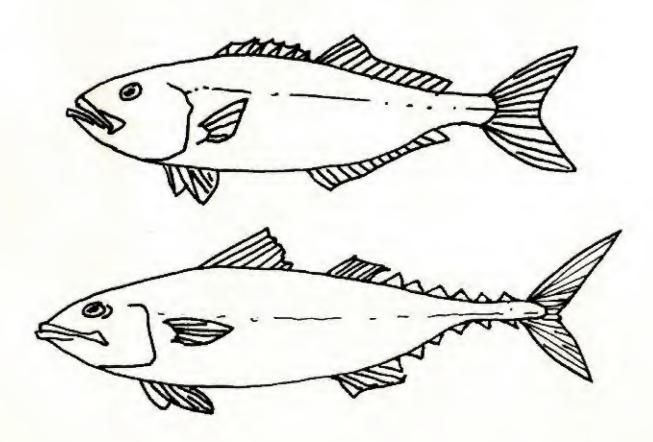
Sometimes the other fins have strange shapes.



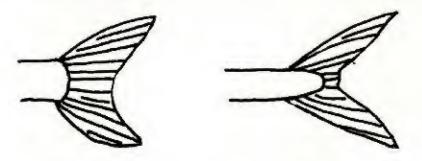
Here are bottom fins that look like stilts. And look at the strange tail fin. Even when the fins do not have strange shapes like sails or wings or stilts, you can still tell one fin from another. But you have to look carefully.

Now let's look at the two fish that were hard to tell apart.

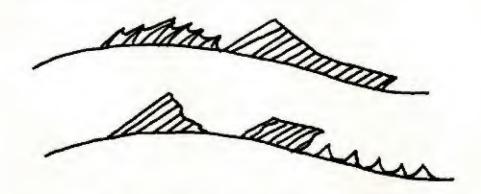
Here they are again.



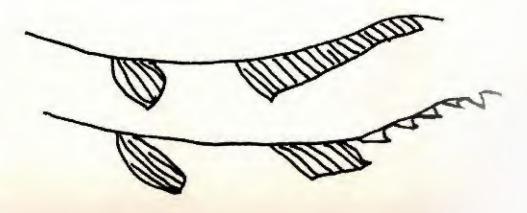
Look at the tail fins. They are different, but not much.



Look at the top fins. They are different.



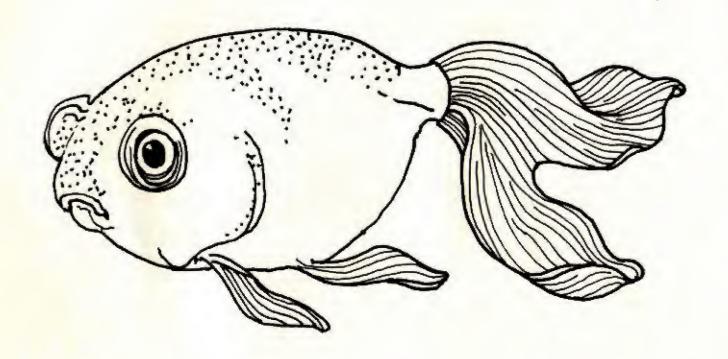
Look at the bottom fins. They are different.



Now we can tell the two fish apart.

A puzzle:

Where are the top fins on this fish?



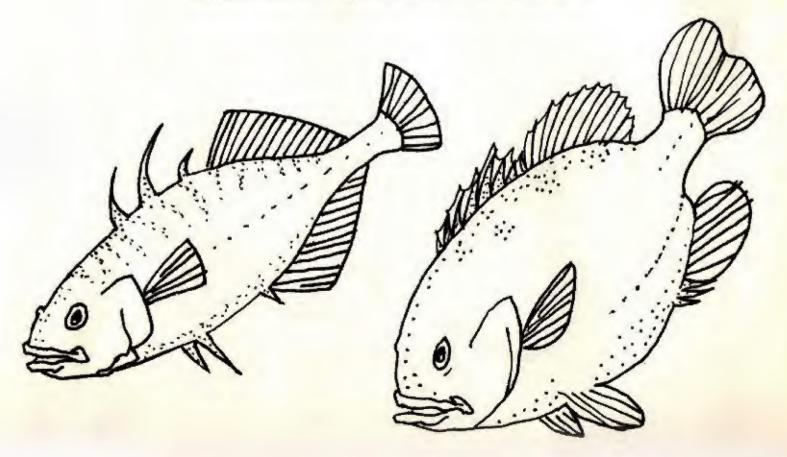
Sometimes certain fins are missing.

There are other things to look for. Many times there are spines in the fins or in front of the fins.

A puzzle:

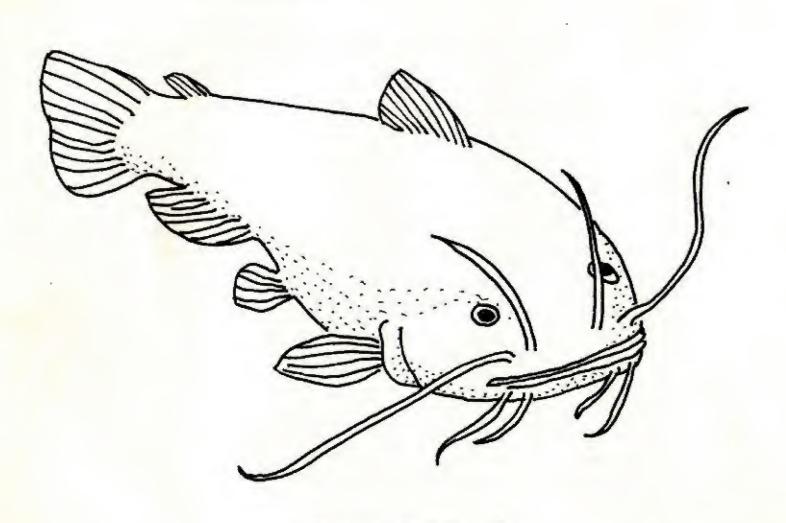
Which fish has spines in its fins?

Which fish has spines in front of its fins?

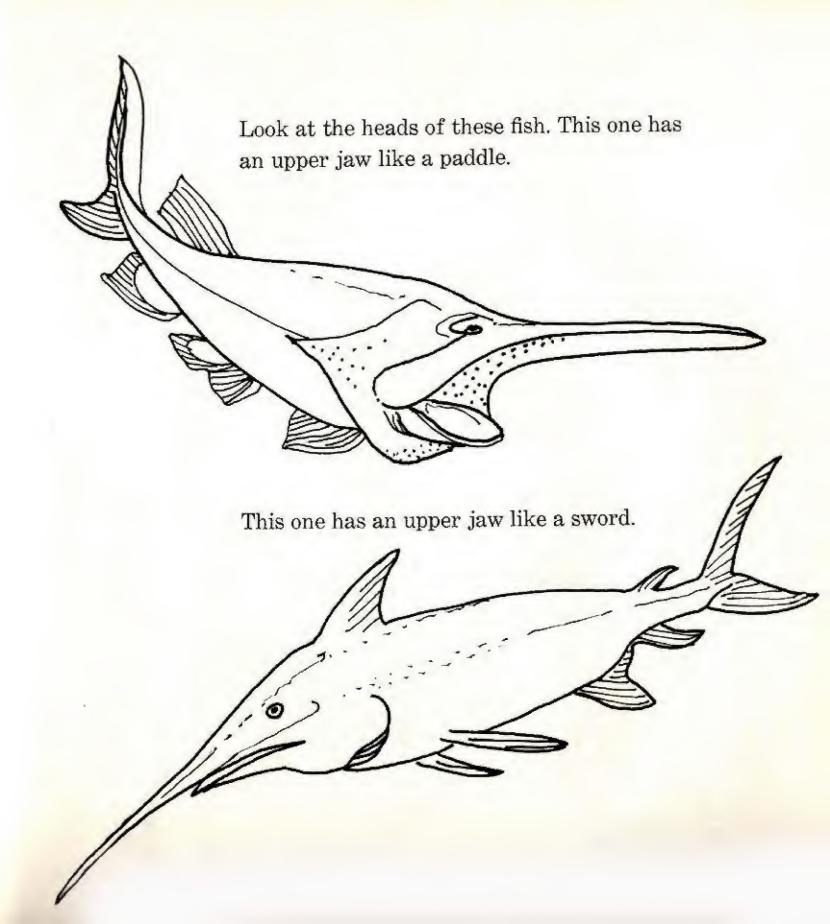


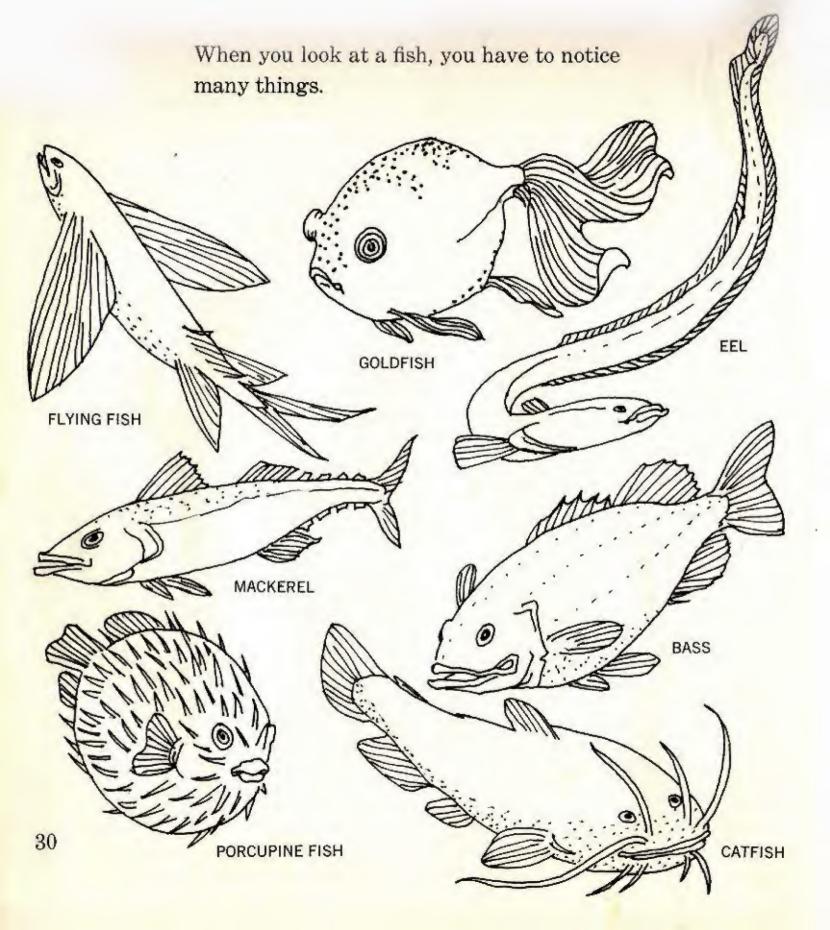
Some fish have feelers under their mouths.

They look like whiskers. They are used to feel and taste food.



Can you find them?





HOW TO MAKE FISH PRINTS

You will need:

an ink roller

printing ink

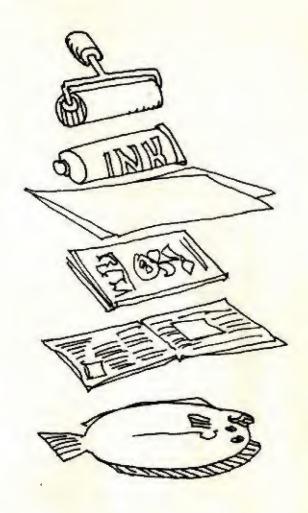
printing paper

a magazine with a smooth cover

newspaper

fish (flounder works well because it is flat)

The ink roller, printing paper, and ink can be bought in any art supply store.

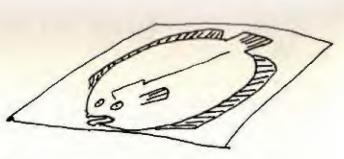


1. Squeeze a blob of ink on the magazine cover.

2. Roll the roller over the ink. Spread the ink evenly.

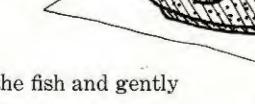


3. Wash the fish with soap. Dry it carefully. Place it on a clean newspaper.

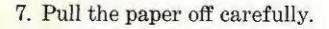


4. Roll the inked roller over every part of the fish except the underside. Use your finger to get into the parts you can't do with the roller.

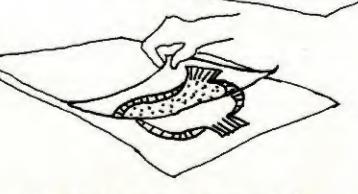
Put the fish ink side up on a clean piece of newspaper.



6. Place the printing paper over the fish and gently press the paper over every part.



8. Your fish print is made.



If you have eaten a fish and the backbone is left, wash it off carefully and make a print of it.

